

Remarks

Claims 1-55 were originally filed in this application.

Claims 1-24 and 33-55 were previously withdrawn from consideration, without prejudice or disclaimer as being directed to non-elected inventions. Previously withdrawn claims 1-14, 22-24, 39-40, 46-47, 49, 51, and 53-55 are canceled without prejudice or disclaimer to facilitate prosecution of this application. As a result, claims 15-21, 33-39, 41-45, 48, 50, and 52 remain withdrawn from consideration as being drawn to non-elected inventions. Of these withdrawn claims, claims 33, 35, 37, 41, 44, and 48 are currently amended without introducing new matter. Applicants respectfully request rejoinder of the withdrawn claims with pending claims 25-32.

No new claims are added.

Independent claim 25 is currently amended without introducing new matter.

Claims 25-32 remain pending for examination, with claim 25 being the only independent claim.

No new matter is added.

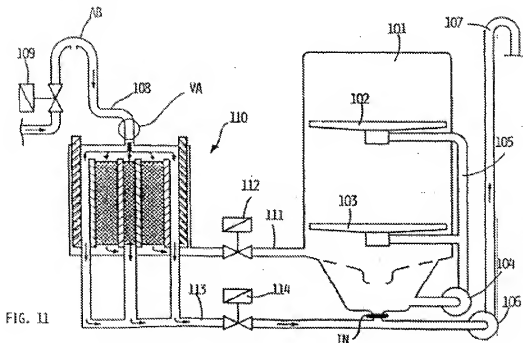
Rejections under 35 U.S.C. § 103

Claims 25-32 are rejected under 35 U.S.C. § 103(a) as obvious over the disclosure of Gadini in International Publication No. WO 01/30229 (hereinafter "Gadini") in view of the disclosure of Gaysowski in U.S. Patent No. 3,074,864 (hereinafter "Gaysowski").

Applicants disagree that the subject matter of independent claim 25 would have been obvious over Gadini in view of Gaysowski because no valid *prima facie* case of obviousness has been set forth.

As previously noted, Gadini discloses a household appliance using water with a supply system, a softening system for at least a portion of the supplied water, and a control system. The appliance also uses permanent water softening means which are controlled by the control system and do not require periodic intervention by the user. (Gadini at Abstract.) At page 25, lines 20-23 and with reference to FIG. 11 (reproduced

below), Gadini explains that the metering of the softened water can be performed by utilizing valves 109, VA, 112, and 114 through the use of a standard pressure-switch or turbine flowmeter or by means of metering tanks or dosing containers. At lines 10 *et seq.* of page 25, Gadini explains that during use of the decalcifier 110, the ion concentration, *e.g.*, calcium and magnesium ions, in the concentration channel CC increases, as well as in the electrode channels CE1 and CE2. When valve 114 is open and the intercepting device IN is closed, the water from channels CE1, CE2, and CC flow through duct 113 and discharges through duct 107. (Gadini at page 25, lines 15-17.)



Notably, Gadini fails to disclose a positively-charged flow regulator fluidly connected downstream of a concentrating compartment of an electrochemical device.

Gaysowski also does not provide this limitation in the manner presently claimed. Gaysowski, at column 3, lines 3 *et seq.*, with reference to FIGS. 1 and 2 (reproduced below), explains that the demineralizing system 100 comprises a treatment unit 101, a buffer tank 120, a raw water supply pipe 130, and a demineralized supply pipe 140.

Column 7 and FIG. 1 of Gaysowski allegedly teaches that “it is known in the art to control a valve using a positively charged flow regulator.” Gaysowski however, does not apply a positive charge to a valve but instead teaches energizing the solenoid of a valve. Instead, an outlet of chamber 111 of the treatment unit 101 connects to a first pipe

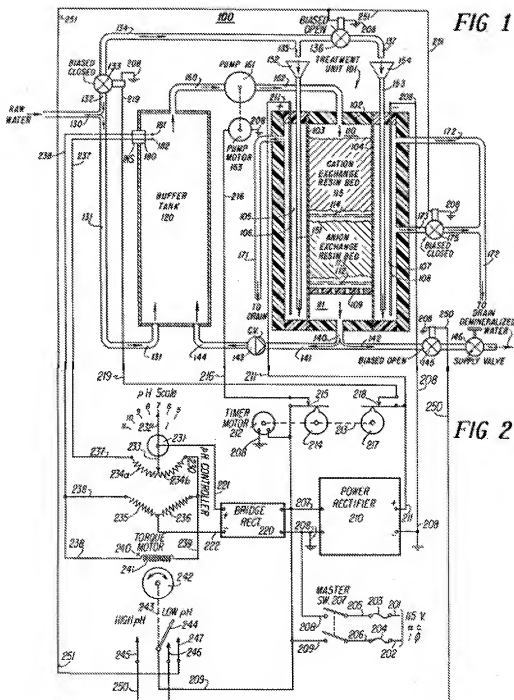
141 which conveys treated water to buffer tank 120 and to a second pipe 142 which conducts the treated and demineralized water to a point of use. (Gaysowski at column 4, lines 40-45.) The delivery pipe 142 has a normally open solenoid operated valve 145 and a supply valve 146 which is preferably manually operated. (Gaysowski at column 4, lines 53-55.) Probes 181 and 182 are operative to sense the pH of the water in buffer tank 120 and connected to the bridge of pH controller 230. (Gaysowski at column 7, lines 52 *et seq.*) When a sufficient change in resistance between probes 181 and 182, indicating a sufficiently high or low pH, is communicated to the pH controller, the bridge thereof “unbalances” and causes arm 244 to move toward contacts 245 or 246, thereby applying a potential from a conductor 209 to a conductor 250 to the solenoid of valve 145, moving the valve from the normally open position to the closed position. (Gaysowski at column 7, lines 60 *et seq.* and at column 8, lines 61-70.)

Energizing a solenoid actuates the valve to open or close to regulate the flow of fluid therethrough. In contrast, applying and/or maintaining a positive charge on a flow regulator does not change the flow rate of the fluid flowing through the flow regulator. Thus, Gaysowski also does not teach or suggest a positively-charged flow regulator downstream of a concentrating compartment of an electrochemical device, as recited in independent claim 25. At best, Gaysowski suggests utilizing energizable solenoids to control fluid flow. Even if Gadini could have been modified to incorporate the techniques of Gaysowski, the resultant combination would still lack a positively-charged flow regulator fluidly connected downstream of a concentrating compartment of an electrochemical device. To be sure, Gaysowski does not disclose a positively-charged flow regulator with a charge sufficient to generate hydrogen ions in a fluid in the valve.

Therefore, independent claim 25 would not have been obvious over the Gadini in view of Gaysowski because no proper *prima facie* case of obviousness has been presented. Dependent claims 26-32, which depend ultimately from independent claim 25 would also not have been obvious for at least the same reasons noted above.

Accordingly, Applicants request reconsideration and withdrawal of the rejection of claims 25-32 under 35 U.S.C. § 103.

The subject matter of each of independent claims 15, 21, 33, 37, 48, and 52, as well as each of the claims respectively dependent therefrom, pertains to a common advantageous feature of the invention. Therefore, Applicants request withdrawal of the restriction and rejoinder and examination of claims 15-21, 33-38, 41-45, 48, 50, and 52.



Conclusion

In view of the foregoing Amendments and Remarks, this application is in condition for allowance; a notice to this effect is respectfully requested. If the examiner believes, that the application is not in condition for allowance, the examiner is requested to call Applicants' attorney at the telephone number listed below.

If this Response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicants hereby request any necessary extension of time. If there is a fee occasioned by this Response, including an extension fee that is not covered by an enclosed check, please charge any deficiency to Deposit Account No. 50/2762 (ref. no. I0168-707919).

Respectfully submitted,
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